

March 3, 1999

Commissioner Harold W. Furchtgott-Roth
Federal Communications Commission
The Portals
445 Twelfth Street, S.W.
Washington, D.C. 20554

EX PARTE OR LATE FILED

Re: Ex Parte Presentation
CC Docket No. 94-102

Dear Commissioner Furchtgott-Roth;

During our meeting on Friday, February 26, Paul Misner asked us to prepare a drawing of concentric contours to illustrate the areas where a user of a hand held cellular phone would experience good service, poor service and lock-in with CTIA's Automatic A/B Roaming proposal. The attached diagram is submitted in response to that request. This drawing, as Mr. Misner anticipated, demonstrates the problem better than the numbers and words in our handout and we have taken the liberty of giving this letter wide distribution because it is a very constructive supplement to our presentations on this subject.

We selected an actual analog cell site which is calculated and designed in accordance with the Commission's Rules to provide service to a 3-watt mobile cellular telephone. This cell site is located in an industrial/suburban area and is operated by a major cellular mobile radio service provider. The up-link and the down-link are balanced for mobile telephone use. The total area covered by the cell site is 1561.4 square miles.

We superimposed two contours on this map. The -80Dbm contour (in red) shows the outer edge of the area described in the Trott report where a portable handset can reliably make and receive calls without experiencing static and dropped calls. This area covers 385.75 square miles and represents about 25% of the total cell site coverage.

The -108 Dbm contour (in blue) of received signal at the portable handset represents a level of -116Dbm from the handset to the tower due to the limited output power available from the portable handset. The area between the -80Dbm contour and the -108Dbm contour defines

the region within the cell site coverage where the portable handset will increasingly encounter static and dropped calls. This section covers 734.3 square miles and represents 47% of the total territory covered by this cell site.

The area between the outer cell boundary (in green) and the -108Dbm contour represents the "Lock-In" sector where the hand held cellular telephone can hear the cell site without difficulty but the cell site cannot hear the supervisory audio tone from the handset on the assigned voice channel. This results in the user hearing only "dead air" when attempting to place a call. The Lock-In zone covers 441.35 square miles and represents 28.3% of the total territory covered by this cell site. The Lock-In zone is 3.3% larger than the region where good quality communications will be provided to a portable handset.

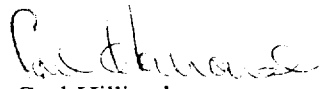
When you add overlapping cell site contours some of these Lock-In areas fill in leaving what has been called "holes" or "dead zones." Strongest Signal has the effect of consolidating both cellular systems into a single system for the purpose of making a 911 emergency call. Our studies in Los Angeles indicated that the combined use of both cellular systems eliminated more than 98% of the dead zones. Our tests also show that in Dallas and Atlanta, Strongest Signal will result in 80% more emergency calls being connected than the Automatic A/B Roaming proposal.

On July 26, 1996, the Commission said "ideally, a 911 call should be handled by whatever wireless system is available in the area of need and, if there are multiple systems available, by the one that will provide the quickest and most reliable and accurate response." (R&O, ¶ 145). Strongest Signal meets this requirement -- Automatic A/B Roaming does not. The industry's resistance to Strongest Signal is reminiscent of the automobile industry's long battle against passive safety restraints which the industry labeled a "potential safety disaster;" "a ripoff;" "too complex, too expensive;" will "provide far to little protection to passengers;" "no research has demonstrated" their effectiveness and, "their safety remains in serious doubt." These are the same flawed arguments made by CTIA in opposition to Strongest Signal as part of the same strategy of aggressive resistance to any regulation, even when public safety is at stake.

The public has an expectation that a caller will be able to reach 911 from any location using a wireless phone a result of the industry's extensive marketing and advertising of the "safety and security" provided by their service. At the same time, the wireless carriers adopted a goal of strict profit maximization that drives them to limit the upgrade and expansion of their systems unless such improvements are supported by a commensurate high return on investment from revenue calls. Thus, the objective of CTIA throughout this proceeding has been to reduce the number of non-revenue 911 calls a carrier must handle and limit those calls to their subscribers. The Commission has previously rejected CTIA's efforts to limit access to 911 and stated "one of our goals is to ensure that as many 911 calls are processed as feasible." (R&O, ¶ 149). The Alliance's petition for a rule change requiring Strongest Signal was filed on October 15, 1995. With all respect, this is one of those situations where the public interest requires a mandated solution, like safety restraints, and we urge the Commission to adopt Strongest Signal without further delay.

I want to again thank you and your staff for your courtesy and consideration of our presentations.

Sincerely,



Carl Hilliard

cc: Commission

Ms. Karen Brown, Chief of Staff, Chairman Kennard
Mr. Ari Fitzgerald, Legal Advisor to the Chairman
Ms. Karen Gulick, Legal Advisor to Commissioner Tristani
Mr. Peter Tenhula, Legal Advisor to Commissioner Powell
Mr. Dan Connors, Legal Advisor to Commissioner Ness
Mr. Paul Misner, Chief of Staff and Legal Advisor to Commissioner Furchtgott-Roth

Wireless Telecommunications Bureau

Mr. Thomas J. Sugrue, Chief of the Bureau
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Mr. Ron Netro, Senior Engineer, Policy Division
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Ms. Magalie Roman Salas

Total cell area equals 1561.4 sq. miles

